MAKING A GREAT PLACE

Metro

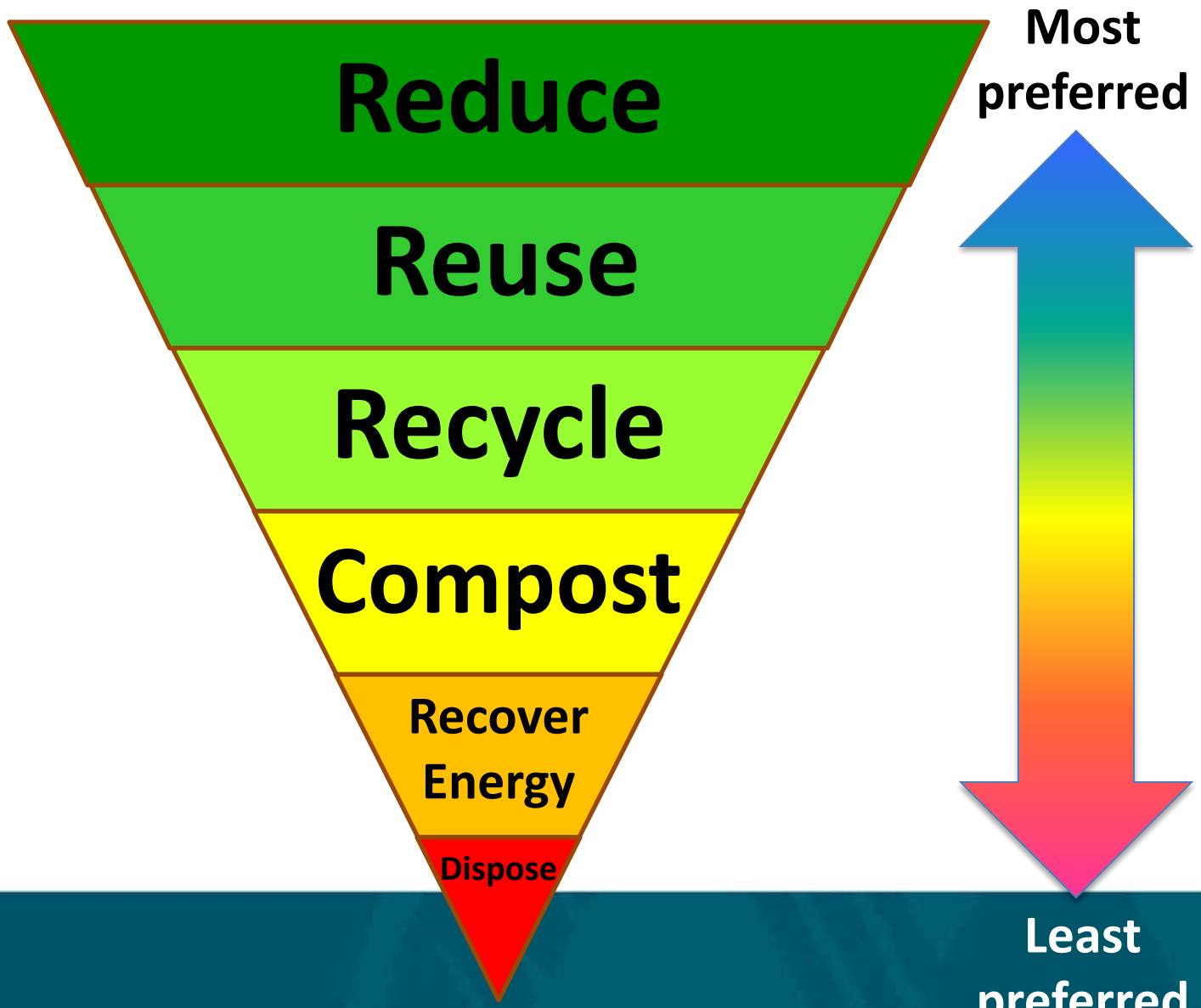
SWAAC July 8, 2015
Long Term Management

SWAAC July 8, 2015
Long Term Management – Agenda

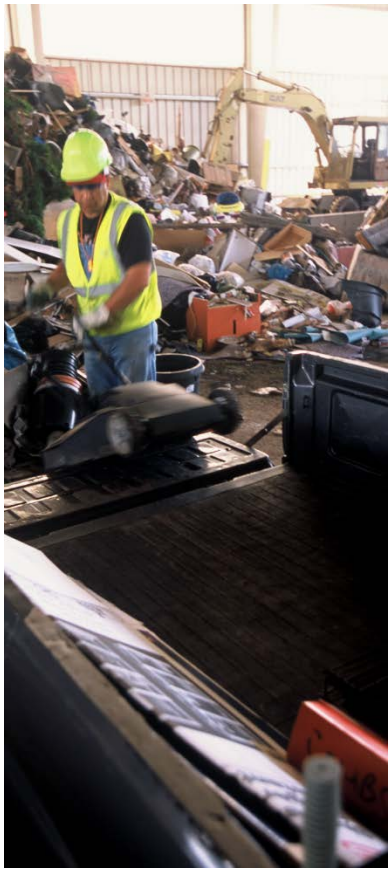
1. Purpose and desired outcome
2. Summary information on Long-Term options
3. Staff Thoughts
4. Proposed Next Steps
5. SWAAC input and discussion

Metro

Solid waste hierarchy



Public benefits



- Protect people's health
- Protect the environment
- Get good value for the public's money
- Be adaptable and responsive in managing materials
- Ensure services are available to all types of customers
- Keep our commitment to the highest and best use of resources

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Long Term Waste Management Options

Combined Qualitative Analysis And Greenhouse Gas Analysis Of Selected Waste Scenarios

HDR

March
2015

Need for industry input

Information to tip the scales

Overview of Responses

- Nineteen responses from companies worldwide
- Five companies that have local operations
- Not all responses compatible with MSW
- Responses included offerings of one or more of all five management options

Overview Cont.

- 14 respondents proposed to use advanced material recovery
- Four offered direct combustion technologies
- Five offered gasification
- Eight offered refuse derived fuel (includes drying)
- Four offered plastics to fuel
- 14 offered anaerobic digestion options (both dry and wet processes were offered); however, Three required source separated organics

RFEOI Responses Summarized

	Type(s) of technologies proposed					
	AMR	WTE	Gasify	AD	RDF	P2F
1		x				
2		x				
3		x				
4		x				
5					x	
6					x	
7					x	
8			x			
9					x	
10			x			
11			x			
12					x	
13	x					
14					x	
15						x
16			x			
17				x		
18				x		
19				x		

AMR is Advanced Material Recovery; **WTE** is Direct Combustion; **Gasify** is Gasification
AD is Anaerobic Digestion; **RDF** is Refuse Derived Fuel; **P2F** is Plastics to Fuel

Advanced Material Recovery

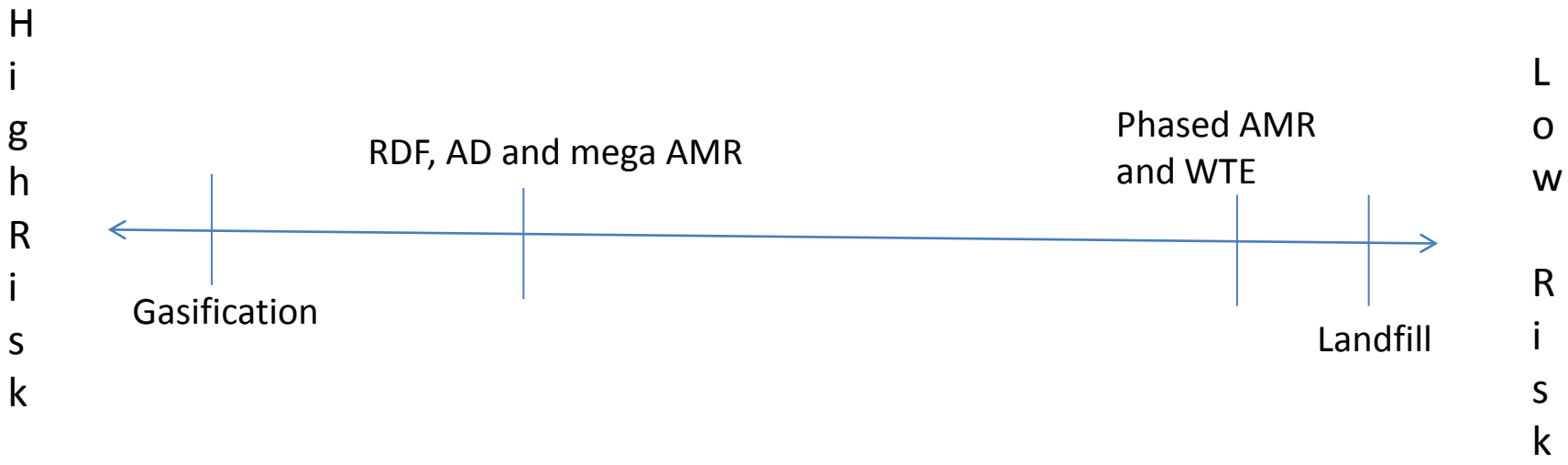
- Two purposes
  1. Recover material
  2. Create feedstock
- System considerations
  1. Where to employ
  2. When to employ

Dry Anaerobic Digestion.

- Extracting the organic fraction from MSW is sensitive to collection methods and requires advanced material recovery infrastructure

- The regional solid waste management plan calls for source separated organics, which will impact feasibility of dry anaerobic digestion.

Implementation Risk



Preliminary Thoughts

1. Consider methods of employing Advanced Material Recovery:

- This may be more policy than technology driven
- Consider phasing in options
- Consider impacts /risks to stakeholders and Metro
- Discuss with key stakeholders

2. Delay consideration of Dry Anaerobic Digestion of garbage until Food Scraps Roadmap has matured

3. Further explore conventional waste to energy options:

- What are the economic impacts of the amount of waste guaranteed
- Where could or should the technology be sited.
- What are financial risks to Metro and its stakeholders.

4. Delay Gasification and Refuse Derived Fuel.

- Gasification is not ready for commercial use of Metro's MSW
- RDF will be difficult to find a market for in our region.

Proposed Next Steps

- Reach out to conventional waste to energy providers to get details of implementation cost and schedule
- Develop alternatives for implementing advanced material recovery in the region
- Stakeholder and Public Outreach
- Fall; Council to decide what, if any, alternative technologies should be pursued for implementation.